#### IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of: Richard A. Mathies, et al.

Attorney Docket No.: UCALP031

Application No.: To be Assigned

Examiner: Unknown

Filed: Herewith

Group: Unknown

Title: METHODS AND APPARATUS FOR PATHOGEN DETECTION AND ANALYSIS

CERTIFICATE OF EXPRESS MAILING

I hereby certify that this paper and the documents and/or fees referred to as attached therein are being deposited with the United States Postal Service on in an envelope as "Express Mail Post Office to Addressee" service under 37 CFR §1.10, Mailing Label Number EV 624633825 US, addressed to the Commissioner for Patents, P.O. Box 1450 Alexandria, VA 22313-1450.

POWER OF ATTORNEY BY ASSIGNEE AND EXCLUSION OF INVENTOR(S) UNDER 37 C.F.R. 3.71

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Sir:

The undersigned, as authorized representative of the assignee of the entire right, title and interest in the above-identified application, hereby appoints the law firm of Beyer Weaver & Thomas, LLP and all practitioners who are associated with the **Customer Number 022434** as its attorneys to prosecute the application and transact all business in the Patent and Trademark Office connected therewith with full powers of substitution and revocation, said appointment to be the exclusion of the inventors and their attorney(s) in accordance with the provisions of 37 CFR §3.71 et seq. of the Patent Office Rules of Practice.

An assignment of the entire interest in the subject application is submitted herewith for recording.

Please direct all communications regarding the application to the attorney at the address and telephone numbers indicated below.

William J. Egan, III BEYER WEAVER & THOMAS, LLP. P.O. Box 70250 Oakland, CA 94612-0250 (510) 663-1100 (510) 663-0920

Dated:	6/23/05	
		۰

Assignee: The Regents of the University of California

Signature: (Market)

Carol Mimura, Ph.D.

Executive Director, Office of Technology Licensing

2150 Shattuck Ave., Suite 510 Berkeley, CA 94720-1620

## Rec'd PCT/PTO 23 JUN 2005

### DECLARATION FOR ORIGINAL U.S. PATENT APPLICATION

I believe that I am the original, first and sole inventor (if only one name is listed below) or an original, first and joint inventor (if plural

Attorney's Docket No. UCALP031

As a below-named inventor, I hereby declare that:

My residence, post office address and citizenship are as stated below next to my name.

names are listed below) of the subject matter which is claimed and for which a patent is sought on the invention entitled: METHODS AND APPARATUS FOR PATHOGEN DETECTION AND ANALYSIS the specification of which, 1. X (check one) is attached hereto. was filed on \_\_\_\_\_\_ as 2.  $\square$ U.S. Application No. and was amended on \_\_\_\_\_\_. was filed on \_\_\_\_\_\_ as
International PCT Application Serial No. \_\_\_\_\_ and was amended on \_\_\_\_\_\_. I hereby state that I have reviewed and understand the contents of the above-identified specification, including the claims, as amended by any amendment referred to above. I acknowledge the duty to disclose information which is material to the patentability of this application in accordance with Title 37, CFR §1.56. Prior Foreign Application(s) I hereby claim foreign priority benefits under Title 35, United States code, § 119 of any foreign application(s) for patent or inventor's certificate listed below and have also identified below any foreign application for patent or inventor's certificate having a filing date before that of the application on which priority is claimed: Priority Benefits Claimed? 12/29/03 PCT/US03/41466 No (Date Filed- Day/Month/Year) (Appl. No.) (Country) (Appl. No.) (Date Filed- Day/Month/Year) (Country) Provisional Application(s) I hereby claim the benefit under 35 U.S.C. §119(e) of any United States provisional application(s) listed below: December 30, 2002 60/437,262 (Application No.) (Filing Date) 60/475,013 May 30, 2003 (Application No.) (Filing Date) Prior U.S. Application(s) I hereby claim the benefit under Title 35, United Sates Code, § 120 of any United States application(s) listed below and, insofar as the subject matter of each of the claims of this applications is not disclosed in the prior United States application in the manner provided by the first paragraph of Title 35, United States Code, § 112, I acknowledge the duty to disclose material information as defined in Title 37, Code of Federal Regulations, § 1.56 which occurred between the filing date of the prior application and the national or PCT international filing date of this application:

(Filing Date)

Page 1 of 4

(Status - patented, pending, abandoned)

(Revised 03/00)

(Application No.)

Atty. Dkt. No.: UCALP031

Send Correspondence To:

Customer Number: (0224

**Direct Telephone Calls To:** 

William J. Egan, III at telephone number (510) 663-1100

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under section 1001 of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application or any patent issuing thereon.

Typewritten Full Name of				
First Inventor:	Richard A. Mathies	Citizenship:	United States	<del>-</del>
Inventor's signature:	Richard a. Mather	Date of Signature:_	6/20/05	-CA
Residence: (City)	Moraga	(State/Country)	CA/USA	-
Post Office Address:	93 Danefield Place, Moraga, CA 94556			_
Full Name of Second Joint Inventor (if any):	William H. Grover	Citizenship:	United States	_
Inventor's signature:	William Drewn	Date of Signature:	6/20/05	- / 1
Residence: (City)	Berkeley Dlace # 207	(State/Country)	CA/USA	- -
Post Office Address:	1771 Highland Place, # 207, 2214 Channing Way, # & Berkeley, CA 94	9 470 <b>4</b>		······································
Full Name of Third Joint Inventor (if any):  Inventor's signature:	Brian Paegel	Citizenship:  Date of Signature:	United States	_
Residence: (City)	Berkeley	(State/Country)	CA/USA	_CA
Post Office Address:	4747 Hamilton Street, #10, San Diego, CA	92116		_
Full Name of Fourth Joint Inventor (if any):	Alison Skelley	Citizenship:	Canada	_
Inventor's signature:	Mon Hulley	Date of Signature:	June 20/05	
Residence: (City)	Berkeley	(State/Country)	CA/USA	- CA
Post Office Address:	#207 1771 Highland Place, #204, Berkeley, CA	94709		_

Atty. Dkt. No.: UCALP031

(Revised 03/00)

Page 2 of 4

Full Name of Fifth Joint Inventor (if any):	Chung N. Liu	Citizenship:	United Sta	tes -
Inventor's signature:		Date of Signature:	1/20/05	
Residence: (City)	Albany	(State/Country)	CA/USA	_CA
Post Office Address:	1070 Jackson Street, #710, Alb	pany, CA 94706		_
Full Name of Sixth Joint Inventor (if any):	Eric Lagally	Citizenship:	United States	
Inventor's signature:		Date of Signature:		_
Residence: (City)	Oakland	(State/Country)	CA/USA	_ CA
Post Office Address:	2727 Miradero Drive, #208, Sa	anta Barbara, CA 93105		_
رن Full Name of Seventh Joint				
Inventor (if any):	Robert Blazej	Citizenship:	United States	<del>_</del>
Inventor's signature:	Rober Blow	Date of Signature:	6-20-05	<del></del>
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# Acc'd PCT/PTO 23 JUN 2005

## DECLARATION FOR ORIGINAL U.S. PATENT APPLICATION

(510) 663 - 0920 Attorney's Docket No. UCALP031

As a below-named inventor, I hereby declare that:

5pp.

My residence, post office address and citizenship are as stated below next to my name.

I believe that I am the original, first and sole inventor (if only one name is listed below) or an original, first and joint inventor (if plura
names are listed below) of the subject matter which is claimed and for which a patent is sought on the invention entitled:
METHODS AND APPARATUS FOR PATHOGEN DETECTION AND ANALYSIS the specification of
which

which,					•		
(check one)	1. 🛛	is attached hereto.					
	2. 🗌	was filed on			as		
	2.	U.S. Applie	cation No.		as		
		and was an	nended on				
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			al PCT Application Serianended on				
		and was an	lended on		·		
I hereby state that by any amendment			contents of the above-ider	ntified specification,	including	the claims, as an	nended
I acknowledge the CFR §1.56.	duty to disclos	se information which	is material to the patenta	bility of this applica	ation in acc	cordance with Ti	itle 37,
Prior Foreign Ap	plication(s)						
certificate listed be	elow and have a	-	United States code, § 119 any foreign application feed:		, ,	-	
	P	,		· Pr	iority Bene	efits Claimed?	
PCT/US03/41466		PCT	12/29/03	<del></del>	X Yes	NoNo	
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(Appl. No.)		(Country)	(Date Filed- Day/Mo	onth/Year)	Yes N	No	
Provisional Appli	cation(s)						
I hereby claim the	benefit under 3:	5 U.S.C. §119(e) of ar	ny United States provision	nal application(s) lis	ted below:		•
4	50/437,262	D	ecember 30, 2002				
(Application No.)	30/43/1,202		Filing Date)				
6	50/475,013	М	(ay 30, 2003				
(Application No.)	507 1753515		iling Date)				
Prior U.S. Applica	ation(s)						
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•		•	Code, § 120 of any United in the poly		` '	-	
by the first paragra	aph of Title 35	, United States Code,	§ 112, I acknowledge the	e duty to disclose r	material inf	formation as defi	ined in
international filing	•		curred between the filing	date of the prior ap	prication as	nd the national c	or PC I
. 3	11					. :	
(Application No.)		(Filing Dat	e) (Status -	patented, pending, a	bandoned)		
Atty. Dkt. No.: UC	CALP031		Page 1 of 4				
(Revised 03/00)							

**Send Correspondence To:** 

Customer Number: 022434

022434

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#### William J. Egan, III at telephone number (510) 663-1100

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under section 1001 of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application or any patent issuing thereon.

Typewritten Full					
First Inventor:	Ricl	nard A. Mathies	Citizenship:	United States	
Inventor's signat	ture:		Date of Signature:_	· · · · · · · · · · · · · · · · · · ·	
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Full Name of Secondary (if any):		William H. Grover	Citizenship:	United States	
Inventor's signat	ture:		Date of Signature:_		
Residence:	(City)	Berkeley	(State/Country)	CA/USA	
Post Office Addre	ess:	2214 Channing Way, #1, Berke	ley, CA 94704		
Full Name of Thir Inventor (if any):		Brian Paegel	Citizenship:	United States	
Inventor's signat	ture:		Date of Signature:_		
Residence:	(City)	Berkeley	(State/Country)	CA/USA	
Post Office Addre	ess:	4747 Hamilton Street, #10, San	Diego, CA 92116		
Full Name of Fou Inventor (if any):	rth Joint ——	Alison Skelley	Citizenship:	Canada	
Inventor's signat	ture:	·	Date of Signature:		
Residence:	(City)	Berkeley	(State/Country)	CA/USA	
Post Office Addre	ess:	1771 Highland Place, #204, Ber	keley, CA 94709		

Atty. Dkt. No.: UCALP031

Full Name of Fifth Joint Inventor (if any):		Chung N. Liu	Citizenship:	Hong Kong		
Inventor's signatur	re:		Date of Signature:			
Residence: (0	City)	Albany	(State/Country)	CA/USA		
Post Office Address	:	1070 Jackson Street, #710, Albany, CA 94706				
Full Name of Sixth. Inventor (if any):	Joint	Eric Lagally	Citizenship:	United States		
Inventor's signatu	re:	Sur poply	Date of Signature:	6/20/2005		
Residence: (6	City)	Oakland	(State/Country)	CA/USA		
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Full Name of Seven Inventor (if any):	th Joint	Robert Blazej	Citizenship:	United States		
Inventor's signatur	re:	·	Date of Signature:			
Residence: (6	City)	Berkeley	(State/Country)	CA/USA		
Post Office Address	s:	2940 Claremont Avenue, #1	114, Berkeley, CA 94709	<u> </u>		

### DECLARATION FOR ORIGINAL U.S. PATENT APPLICATION

Attorney's Docket No. UCALP031

As a below-named inventor, I hereby declare that:

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I believe that I am the original, first and sole inventor (if only one name is listed below) or an original. first and joint inventor (if plural names are listed below) of the subject matter which is claimed and for which a patent is sought on the invention entitled:

METHODS AND A which,	PPAR	ATUS FOR	PATHO	GEN DETECT	ION AND A	NALYSIS	the specification of
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	2.	U.S	. Application	on No			as
	3. 🔲	Inte	rnational P	CT Application Seried on	al No		-
I hereby state that I have by any amendment referr			id the conte	ents of the above-ide	entified specifica	ation, includi	ing the claims, as amended
I acknowledge the duty to CFR §1.56.	to disclos	se information	which is m	aterial to the patent	ability of this a	pplication in	accordance with Title 37
Prior Foreign Applicati	ion(s)						
l hereby claim foreign pr certificate listed below a before that of the applica	nd have	also identified	below any	ed States code, § 11 foreign application:	9 of any foreign for patent or inv	ventor's certi	(s) for patent or inventor' ificate having a filing date
PCT/US03/41466		PCT	•	12/29/03	3		Benefits Claimed? Yes No
(Appl. No.)	<del></del>	(Country)		(Date Filed- Day/M		_	
(Appl. No.)	_	(Country)		(Date Filed- Day/M	Ionth/Year)	_Yes	_ No
Provisional Application	(s)						
I hereby claim the benefit	t under 3	5 U.S.C. §119(	e) of any U	nited States provisio	nal application(	s) listed belo	)W:
60/437	,262		Decen	<u>ъьет 30, 2002</u>			
(Application No.)		<del>-</del> —		Datc)	-		
60/475	.013		May 3	0, 2003			
(Application No.)				Date)	-		
Prior U.S. Application(s	s)						
subject matter of each of by the first paragraph of	the clain Title 35 Regulat	ns of this appli . United States tions, § 1.56 wh	cations is n Code, § 1	ot disclosed in the place of the place of the place of the place of the filing of the filing of the filing of the place of	prior United Sta he duty to discl	tes applications ose material	d below and, insofar as the on in the manner provided in information as defined in and the national or PCI
				<b>∞</b> ♥ ~~			

Atty. Dkt. No.: UCALP031

(Filing Date)

(Status - patented, pending, abandoned)

Page 1 of 4

(Revised 03/00)

(Application No.)

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Typewritten Fu			A	The state of the s
First Inventor:	Rich	nard A. Mathies	Citizenship:	United States
Inventor's sign	nature:		Date of Signature:_	
Residence:	(City)	Moraga	(State/Country)	CA/USA
Post Office Ad	dress:	93 Danefield Place, Moraga, CA 945	56	
Full Name of S Inventor (if any	_	William IJ. Grover	Citizenship:	United States
Inventor's sign	nature:		Date of Signature:_	
Residence:	(City)	Berkeley	(State/Country)	CA/USA
Post Office Ad	dress:	2214 Channing Way, #1, Berkeley, C	A 94704	
Full Name of T Inventor (if any	y):	Brian Paegel	Citizenship:	United States
Inventor's sig	nature:	BRIAN M. PRESER	Date of Signature:_	22- June - 2005
Residence:	(City)	Berkeley	(State/Country)	CA/USA
Post Office Ad	ldress:	4747 Hamilton Street, #10, San Diege	a, CA 92116	
Full Name of I		Alison Skelley	Citizenship:	Canada
Inventor's sig	nature:		Date of Signature:_	
Residence:	(City)	Berkeley	(State/Country)	CA/USA
Post Office Ad	ldress:	1771 Highland Place, #204, Berkeley	CA 94709	

Atty, Dkt. No.: UCALP031

(Revised 03/00)

Full Name of Fifth Joint Inventor (if any):	Chung N. Liu	Citizenship:	Hong Kong
[nventor's signature: _		Date of Signature:_	
Residence: (City) _	Albany	(State/Country)	CA/USA
Post Office Address:	1070 Jackson Street, #710, Al	bany, CA 94706	
Full Name of Sixth Joint Inventor (if any):  Inventor's signature:	Eric Lagally	D 4 661 4	United States
Residence: (City)	Oakland	(State/Country)	
Post Office Address:	2727 Miradero Drive, #208, S		
Full Name of Seventh Joint Inventor (if any):	Robert Blazej	Citizenship: Date of Signature:_	United States
Residence: (City)	Berkeley	(State/Country)	CA/USA
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Atty. Dkt. No.: UCALP031

(Revised 03/00)